

# SMOG PATROL

The Ministry of the Environment (MOE) supports the Drive Clean program by conducting province-wide roadside inspections. Heavy and light duty vehicles are inspected to ensure compliance with Ontario's motor vehicle emission standards. Inspections focus on vehicles that present the greatest risk to air quality.

Uniformed officers drive specially marked ministry vehicles. Officers also use bicycles and motorcycles to better access polluting vehicles in congested traffic conditions. During vehicle inspection blitzes officers may work with other enforcement agencies such as the Ontario Provincial Police, Ministry of Transportation, and other local police services.



Vehicle emissions inspections can occur anytime and anywhere on Ontario and out-of-province registered vehicles. When inspecting passenger vehicles, officers give a visual check ensuring the emission components haven't been tampered with. Any visible smoke emission is timed to determine if it's excessive. Officers inspecting heavy-duty trucks or buses place a sensor in the exhaust pipe to measure the opacity of the exhaust (opacity is the amount of visible light that is blocked by the vehicle exhaust smoke). If a vehicle fails testing or the emission control equipment has been altered or removed, officers can issue tickets, Provincial Officer Orders, and seize vehicle licence plates.

**E.R.A.S.E.** (Eliminate Racing Activity on Streets Everywhere) is an awareness and enforcement campaign which aims to combat street racing and high risk driving behaviours.

Project E.R.A.S.E was implemented in 2000 to respond to increased street racing in the Greater Toronto Area. Officers from the Ministry of the Environment work with 21 police services across Ontario as well as the Ministry of Transportation. The initiative is

coordinated by the police services and focuses inspections on modified vehicles. These vehicles often have their engines and emission control systems modified and do not meet the regulated emission standards.

The Ministry of the Environment supports Project E.R.A.S.E because illegally modified vehicles can emit more smog causing pollutants and burn more fuel than properly tuned vehicles.



## Emission Components: What do they do?

In 2006 the ministry teamed up with Environment Canada to analyze the effects of disconnected or malfunctioning emission control technology on light duty vehicles.

Two vehicles were first tested with all original equipment in place to determine baseline emissions test results. Emission components were then removed from the vehicles one at a time in order to determine the individual component's environmental impact.

The ministry conducted 169 tests using specialized equipment including a dynamometer and gas analyzers. In one test, the impact of removing one piece of emission control equipment

showed that the combined emission levels for three harmful gasses increased from 11 lbs to 1700 lbs per year (based on an average annual driving of 20,000 km per year). This is about 148 times worse than the baseline tests - meaning that this one vehicle was emitting gases equivalent to 148 similar properly tuned vehicles. Fuel consumption also increased by 25 percent resulting in an increase of \$637 per year (based on \$1/L).

In general, tampering with any of the emission control systems had a negative impact on one or more of the exhaust emissions and/or fuel economy, thereby increasing the vehicle's contribution to poor air quality, greenhouse gases and ground level ozone.



## Smog Patrol Officer Targets Polluters



Travelling by bike, hybrid truck, or motorcycle, Don Pearson and his vehicle emissions enforcement colleagues are on the hunt for smog creating vehicles.

Pearson has been with the Ministry of the Environment for seven years as part of the team that is sometimes called the “Smog Patrol.” These officers work across the province, looking for environmental infractions such as polluting cars and improper transport of hazardous waste.

Working outside and doing his part for the planet is only part of why Pearson loves his job. “It’s great being out from behind a desk and getting to see the whole province. I get to work with different agencies and new people everyday. It’s pretty exciting.”

The vehicle emissions enforcement team travels across the province, working with local law enforcement. “[Summer of 2007]

we went all across the top of northern Ontario, from Cochrane to Kenora,” said Pearson.

Signs that a vehicle might need to be inspected by Pearson and his colleagues include obvious modification (muffler changes), a different sound to the engine or an odd odour behind the car. “Everyone has been stuck behind a car like that in traffic. It’s pretty obvious when a car’s exhaust smells that bad that it’s poorly maintained,” said Pearson.

Pearson is also a bike instructor for “Can Bike,” a nationally recognized course for enforcement officers on road safety, bike maintenance and effective cycling. Working on a bike is definitely something he loves about his position with MOE. “It’s great to be able to exercise as part of your job.”

If Pearson could give drivers any advice before they head out on those summer road trips, it would be to keep your car in “top shape.”

“Everyone needs to keep their cars tuned up and well maintained. It’s a great personal way to reduce smog and stop pollutants from getting into our air.”



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## The Drive Clean Program

Drive Clean is Ontario's mandatory vehicle emissions inspection and maintenance program that is reducing vehicle emissions of smog-causing pollutants by requiring vehicles to undergo an emissions test to identify emissions problems and have them repaired. In addition to smog-causing pollutants, Drive Clean is also reducing vehicle emissions of other chemicals, including greenhouse gases that damage our health and our environment. Through Drive Clean, we have an opportunity to make a positive contribution to the quality of our air through good vehicle maintenance, and by identifying emissions problems so that they can be corrected.



## Report a Smoking Vehicle

If you see a smoking vehicle, you can complete the online form at [www.driveclean.com](http://www.driveclean.com). You can also call in the licence plate, a vehicle description, the location, date and time of the occurrence and the colour of the smoke, to the Drive Clean Call Centre at 1-888-758-2999. Please be assured we are doing everything we can to stop these types of occurrences. The Smog Patrol follows up on smoking vehicle complaints to ensure the vehicles are in compliance with emission standards.

## The Numbers

Fiscal Year	Inspection Type	Total Inspections	Pass	Fail	Compliance* Rate
2007/2008	Heavy Duty	1,000	883	117	88%
	Light Duty	2,603	1,673	929	64%
	<b>2007/2008 Total</b>	<b>3,603</b>	<b>2,556</b>	<b>1,046</b>	<b>71%</b>
2008/2009	Heavy Duty	1,019	915	104	90%
	Light Duty	2,887	1,779	1,108	62%
	<b>2008/2009 Total</b>	<b>3,906</b>	<b>2,694</b>	<b>1,212</b>	<b>69%</b>

\* Note –These compliance rates reflect the ministry's inspection program and are not representative of the general population of vehicles. The Smog Patrol program focuses on high risk vehicles (i.e. those suspected of non-compliance) and light duty inspections which include vehicles that are not subject to the Drive Clean program (registered outside the program area or exempt due to age). This contributes to a lower compliance rate for these vehicles.

<http://www.ene.gov.on.ca/envision/scb/emissions&enforcement.htm>  
416-314-4278